



Factoring

Name _____

Factor each expression and find the letter of the **MATCHING** answer in the **Alphabet Box**. Decode the secret message using the letter associated with each numbered problem.

$\frac{17}{18}$ $\frac{2}{6}$ $\frac{10}{19}$ $\frac{5}{20}$ $\frac{3}{14}$ $\frac{4}{9}$ $\frac{8}{13}$ $\frac{14}{20}$ $\frac{11}{6}$ $\frac{7}{9}$ $\frac{5}{5}$ $\frac{12}{12}$, $\frac{8}{14}$ $\frac{2}{2}$ $\frac{10}{10}$ $\frac{8}{8}$ $\frac{15}{10}$
 $\frac{18}{18}$ $\frac{6}{6}$ $\frac{1}{1}$ $\frac{19}{19}$ $\frac{20}{20}$ $\frac{14}{14}$ $\frac{9}{9}$ $\frac{13}{13}$ $\frac{20}{20}$ $\frac{6}{6}$ $\frac{9}{9}$ $\frac{5}{5}$ $\frac{12}{12}$ $\frac{14}{14}$ $\frac{2}{2}$ $\frac{10}{10}$
 $\frac{3}{3}$ $\frac{4}{4}$ $\frac{8}{8}$ $\frac{14}{14}$ $\frac{11}{11}$ $\frac{7}{7}$ $\frac{16}{16}$.

1. $x^2 - 3x - 18$
2. $x^2 - 9$
3. $x^2 + 2x - 8$
4. $x^2 - 8x - 9$
5. $x^2 + 3x - 28$
6. $x^2 - 5x - 24$
7. $x^2 + 6x + 9$
8. $x^2 + 10x + 25$
9. $x^2 - 11x + 28$
10. $x^2 - 25$
11. $x^2 - 6x + 8$
12. $x^2 + 3x - 18$
13. $x^2 + 2x + 1$
14. $x^2 + 13x + 30$
15. $x^2 - 2x + 1$
16. $x^2 + 14x + 45$
17. $x^2 - 8x - 48$
18. $x^2 + 30x - 64$
19. $x^2 + 16x + 64$
20. $x^2 - 14x + 45$

Alphabet Box:

A $(x+1)(x-9)$	B $(x+32)(x-2)$	C $(x+5)^2$	D $(x-5)^2$	E $(x+5)(x-5)$	F $(x+4)(x-2)$
G $(x+6)(x-3)$	H $(x-3)(x+3)$	I $(x-7)(x-4)$	J $(x-9)(x+5)$	K $(x-1)^2$	L $(x-9)(x-5)$
M $(x-6)(x+3)$	N $(x+7)(x-4)$	O $(x-4)(x-2)$	P $(x+1)^2$	Q $(x-3)^2$	R $(x+3)^2$
S $(x+9)(x+5)$	T $(x+10)(x+3)$	U $(x+8)^2$	V $(x+3)(x-7)$	W $(x-12)(x+4)$	X $(x+1)(x+9)$
Y $(x+3)(x-8)$	Z $(x-12)(x-4)$				